

WHAT IS CLAIMED IS:

1. A cutting device for spring manufacturing machines,
comprising:

an actuator including a base with a shaft opening, and a connecting
5 rod with a pin hole and a pivot hole fixedly mounted to the base;
a transmission mechanism including a driving shaft furnished in the
shaft opening to drive the actuator in an eccentric revolving movement; and
a sliding mechanism including a track, a positioning shaft, a blade
adjusting block, a slider, a switching pin, a connecting pivot and a blade, the
10 positioning shaft and the blade adjusting block being fixed on the track, the
slider including a first and a second axial holes, being linearly moving back
and forth in the track, the connecting pivot being inserted through the first
axial hole and the pivot hole to connect the slider and the connecting rod,
and the blade being connected to the slider;

15 thereby when the switching pin is inserted through the second axial
hole of the slider and the pin hole of the connecting rod, the track will swing
with respect to the positioning shaft so that the blade will perform an oval
trace cutting operation under the linear movement of the slider and the swing
of the track, and when the switching pin is removed, the track is fixed so that
20 the blade will perform an linear direction cutting operation.

2. The cutting device of Claim 1, wherein the actuator includes a
blade adjusting knob to be mounted in a through hole of the base for
adjusting a cutting point of the blade, and a fixing seat fixed to the base to
secure the connecting rod.

25 3. The cutting device of Claim 2 wherein the blade adjusting knob
has a thread hole formed in the bottom thereof for one threaded end of the

connecting rod to be screwed therein, so that the cutting point of the blade is adjusted by turning the blade adjusting knob.

4. The cutting device of Claim 2, wherein the fixing seat is substantially U-shaped for fitting the connecting rod.

5 5. The cutting device of Claim 1, wherein the actuator includes a cap, and the driving shaft with an eccentric cam is fixedly furnished in the shaft opening with the cap covered thereon.

6. The cutting device of Claim 1, wherein the sliding mechanism includes a cover plate, and the blade is fixedly mounted in a groove formed
10 in the front surface of the bottom portion of the slider and is covered by the cover plate.

7. The cutting device of Claim 1, further comprising a machine plate with a first and a second shaft hole, the driving shaft is pivotably furnished through the first shaft hole, and the position shaft is pivotably
15 furnished in the second shaft hole.

8. The cutting device of Claim 7, further comprising a blade adjusting seat mounted on the machine plate, including a recess for receiving the blade adjusting block and two bolts for clamping the blade adjusting block to fix the track when the switching pin is removed, and not clamping
20 the blade adjusting block when the switching pin is inserted.

9. The cutting device of Claim 7, wherein the bolts are adjusted to tilt the track with respect to the positioning shaft through the blade adjusting block when the switching pin is removed.